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(54) **DEVICES HAVING AN ELECTRON
EMITTING STRUCTURE**

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See application file for complete search history.

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(57) **ABSTRACT**

Controlling total emission current of an electron emitting
construct in an x-ray emitting device by providing a cathode,
providing multiple active areas each active area having a
gated cone electron source, including multiple emitter tips
arranged in an array, a gate electrode, and a gate interconnect
lead connected to the gate electrode, providing an x-ray
emitting construct comprising an anode, the anode being an
x-ray target, situating the x-ray emitting construct facing the
active areas face each other, selecting a set of active areas,
and activating selected active areas by conductively con-
necting a voltage source to their associated the gate elec-
trode interconnect lead.

18 Claims, 21 Drawing Sheets

